UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,427	01/12/2004	Lee Bolduc	203-2626 DIV CON VIII (24	9695
7590 05/15/2007 Mark Farber, Esq. U.S. Surgical, A Division of Tyco Healthcare Group, LP			EXAMINER	
			YABUT, DIANE D	
150 Glover Av		, Lr	ART UNIT	PAPER NUMBER
Norwalk, CT 0	6856		3734	
			MAIL DATE	DELIVERY MODE
•			05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/755,427	BOLDUC ET AL.			
Office Action Summary	Examiner	Art Unit			
	Diane Yabut	3734			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period or Pailure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 4/27/	<u>/07</u> .				
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowa	· ·				
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-18 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 12 January 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	: a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	is have been received. Is have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate			

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 April 2007 has been entered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by **Kapitanov (U.S. Patent No. 4,204,541**).
- Claim 1: Kapitanov discloses an applicator for attaching fasteners to body tissue comprising a distal portion having an elongate outer tube 1, a connecting end and a terminal end, a proximal portion having a handle and an actuator 13, the proximal portion being attached to the connecting end of the distal portion, and a rotator 10 cooperating with the actuator 13 and including a longitudinal groove extending along at

Art Unit: 3734

least a portion of the length of the rotator 10, the groove configured to receive a portion of a fastener 2 wherein the rotator resides within and extends substantially the length of the outer tube 1 such that the actuation of the actuator 13 rotates the fastener 2 relative to the outer tube 1 (Figures 1-2, col. 4, lines 3-12).

<u>Claim 6</u>: Kapitanov discloses a nose piece (at the distal end of element **8** where **13** is the proximal end) attached to the terminal end, the nose piece having structure projecting perpendicularly toward a longitudinal axis of the outer tube and adapted to engage the plurality of fasteners (Figure 1).

<u>Claim 7</u>: Kapitanov discloses the distal portion and the proximal portion being releasably secured together (col. 3, lines 32-34).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapitanov (U.S. Patent No. 4,204,541) in view of Smith et al. (U.S. Patent No. 4,596,350).
- <u>Claims 2 and 3</u>: Kapitanov discloses the claimed device except for a lock/clip indicator for engaging a plurality of fasteners which is configured to prevent actuation of

the actuator upon discharge of the plurality of fasteners from the applicator, and a load spring for applying longitudinal forces against the lock/clip indicator.

Smith et al. teaches a lock/clip indicator **51** for engaging a plurality of fasteners which is configured to prevent actuation of the actuator upon discharge of the plurality of fasteners from the applicator, and a load spring **20** for applying longitudinal forces against the lock/clip indicator (col. 9, lines 35-52). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a lock/clip indicator and load spring, as taught by Smith et al., to Kapitanov since it was known in the art that lock/clip indicators with spring mechanisms stops undesirable forward advancement of fasteners.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kapitanov** (U.S. Patent No. **4,204,541**) in view of **Hooven et al.** (U.S. Patent No. **5,433,721**).

<u>Claims 4 and 5</u>: Kapitanov discloses the claimed device except for a thread form contained in an interior of the terminal end adapted to engage the plurality of fasteners and being an interlock spring fixedly retained in the interior of the terminal end.

Hooven et al. teaches a thread form contained in an interior of the terminal end adapted to engage the plurality of fasteners and being an interlock spring fixedly retained in the interior of the terminal end, wherein "spring" is taken to mean an "actuating force" (Figure 12). It would have been obvious to one of ordinary skill in the art at the time of invention to provide an interior thread being an interlock spring form,

Art Unit: 3734

as taught by Hooven et al., to Kapitanov since it was known in the art that thread form structures are used to engage helical, coil-like structures.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kapitanov** (U.S. Patent No. **4,204,541**) in view of **Green et al.** (U.S. Patent No. **5,100,420**).

<u>Claim 8</u>: Kapitanov discloses the claimed device except for the distal portion being disposable and the proximal portion being reusable.

Green et al. teaches a distal portion being disposable and the proximal portion being reusable (col. 10, lines 47-51). It would have been obvious to one of ordinary skill in the art to provide a disposable distal portion and a reusable proximal portion, as taught by Green et al., to Kapitanov since it was known in the art that disposable distal portions of medical devices is a solution to time-consuming sanitation of the distal ends prior to being introduced into the body.

7. Claims 9, 11-14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kapitanov** (U.S. Patent No. **4,204,541**) in view of **Pratt et al.** (U.S. Patent No. **5,607,436**).

<u>Claims 9 and 14</u>: Kapitanov discloses the claimed device except for a lever with a first end, a midsection, and a second end, a lead screw, and a nut driver.

Pratt et al. teaches a lever **14** having a first end, a midsection, and a second end, the lever pivotally attached about a midpoint to the handle, the first end of the lever for

Art Unit: 3734

gripping by hand, a lead screw **54** rotatably attached to interior of the handle, a nut driver, the second end of the lever pivotally attached to the nut driver, the nut driver for traveling along the lead screw, thereby turning the lead screw, and the lead screw attached to the rotator so that as the lever is depressed by hand the nut driver will travel along the lead screw towards the rotator thereby turning the rotator in the process (Figures 3-7). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a first end, a midsection, and a second end, a lead screw, and a nut driver with all the above limitations, as taught by Pratt et al., to Kapitanov since it was known in the art to use lever, screw, and driver mechanisms to advance fastening members from the interior of an applicator to the exterior.

<u>Claim 11</u>: Kapitanov discloses the claimed device except for the lever having a midsection extension.

Pratt et al. teaches a lever having a midsection extension **36** (Figure 3). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a midsection extension, as taught by Pratt et al., to Kapitanov since it was known in the art that midsection extensions on levers are used in order to engage with the proximal, driver portion of the applicator.

Claims 12, 13, 16 and 18: Kapitanov discloses the claimed device except for gear teeth formed within the interior of a handle, a spring loaded pawl pivotally attached to the midsection extension and adapted to engage the gear teeth, the releasable engagement means being a ratchet mechanism, and a latch pawl cooperating with the teeth to prohibit the lever from backstroking until it has been completely depressed.

Application/Control Number: 10/755,427

Page 7

Art Unit: 3734

Pratt et al. teaches gear teeth **48** formed within the interior of a handle, a spring loaded pawl **40** pivotally attached to the midsection extension and adapted to engage the gear teeth, the relasable engagement means being a ratchet mechanism (Figure 3). It would have been obvious to one of ordinary skill in the art to provide the ratchet mechanism including the gear teeth and spring loaded pawl, as taught by Pratt et al., to Kapitanov since it was known in the art to use ratchet mechanisms to restrict movement in one direction.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kapitanov (**U.S. Patent No. **4,204,541**) in view of **Knodel et al.** (U.S. Patent No. **5,487,500**).

<u>Claim 17</u>: Kapitanov discloses the claimed device, including having a mid-section extension, except for formed in the mid-section extension are a plurality of teeth.

Knodel et al. teaches a mid-section extension with formed plurality of teeth (Figure 6). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a plurality of teeth, as taught by Knodel et al., to Kapitanov's mid-section extension since it was known in the art that teeth are used in ratchet and gear mechanisms which are used in applicators.

Application/Control Number: 10/755,427

Art Unit: 3734

9. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable

Page 8

over Kapitanov (U.S. Patent No. 4,204,541).

Claims 10 and 15: Kapitanov discloses the claimed device except for the lead screw

being a high helix lead screw. It would have been obvious to one of ordinary skill in the

art at the time of invention to provide a high helix lead screw for the lead screw in

Kapitanov since it was known in the art that high helix angle thread screws are high

efficiency using low rotational speeds.

Response to Arguments

10. Applicant's arguments filed 27 April 2007 have been fully considered but they are

not persuasive.

11. Applicant generally argues that the longitudinal groove of Kapitanov is not a

longitudinal groove as recited in claim 1, and that is not intrinsic to the rod 10. The

examiner disagrees. It is noted that the features upon which applicant relies (i.e., the

longitudinal groove being intrinsic to the rod) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Diane Yabut whose telephone number is (571) 272-

6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

Application/Control Number: 10/755,427 Page 9

Art Unit: 3734

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DY

MICHAEL J. HAYES SUPERVISORY PATENT EXAMINER